

RE: SB 598, SB 893, and HB 5481 Environment Committee Public Hearing March 1, 2019

Dear Co-Chairs Cohen and Demicco, Vice-Chairs Gresko and Kushner, Ranking Members Harding and Miner, and members of the Environment Committee:

My name is Pam Patalano and I am an Activist for the Save Pachaug Forest movement, Registrar of Voters for the town of Griswold and a Holistic Business Owner. I appreciate this opportunity to submit testimony in support of the following bills:

**SB 598 An Act Concerning the Production of Hemp in Connecticut**  
**SB 893 An Act Concerning an Enforcement Plan for Hemp Production**  
**HB 5481 An Act Implementing the Legalization of Industrial Hemp**

I am here today in Support of the Farming of Industrial Hemp in Connecticut; and I support it for several reasons. The first is to allow our farmers and our farmlands to be utilized to their fullest potential. The second is, that I believe the economic boost from Hemp farming and production would give Connecticut a fiscal advantage, during a time when we as a state, are struggling to pay our bills as well as struggling to keep residents here in Connecticut. We would also be creating a whole new and exciting industry and countless opportunities for economic growth in our small towns and industrial development right here in Ct. There are almost 25,000 products that are created from Hemp

This Crop would yields so many beneficial products and an abundance of opportunity for people in Ct and around the world and I feel strongly that Connecticut cannot afford to waste any more time – we need to pass these bills so that the farmers can begin planting these crops in 2019. This would allow Connecticut to be in alignment with the other states that are growing industrial Hemp and for Ct to reap the economic, financial and health benefits this crop has to offer. As it stands, Canada is supplying the USA with CBD and other Hemp products. This means they are reaping the financial benefits as well.

America already safely consumes \$580m worth of products made from imported hemp every year – from milk to T-shirts to soaps. Yet because it has been illegal to import or cultivate seeds, the farming, processing and manufacturing jobs associated with hemp belong to the 30 countries growing it, from Canada to France to China.

I am interested in the Health and Wellness aspect of Hemp, specifically the production, and benefits of CBD oil. Please see the charts below for the Benefits of CBD Oil

**I IMPORE YOU TO PASS THESE BILLS** and let's get Connecticut back on its feet and let it be the industry leader it once was.

Thank you for your time and consideration.

# Potential health benefits of CBD

- The condition
- A summary of findings
- And a Cannabis Health Index (CHI) score for each condition. The CHI uses a 5-point system to note the efficacy of cannabis (not just CBD) in a condition. 1 point notes a possibility of efficacy, while 5 points represents demonstrable efficacy.

Condition	Evidence	CHI Score (1-5)
ADHD	CBD may make more dopamine available to the brain, much like stimulant medications prescribed to treat ADHD. The 1:1 CBD/THC medicine Sativex was shown to improve cognition and behavior in adults with ADHD.	2
Addiction	CBD may dull the “reward” an addicted brain gets from opioids. It also may alleviate withdrawal symptoms. Opioid overdose deaths were almost 25% lower in states with medicinal cannabis laws.	2.5
Alzheimer’s Disease	CBD has shown promise in neutralizing free radicals, reducing inflammation in the brain, and combatting oxidation, thus having neuroprotective potential. We spoke with a researcher who suggests a “puff a day might keep Alzheimer’s away.”	2.5
Anxiety	Cannabis has been used to reduce anxiety for centuries. Though THC may increase feelings of unease, CBD has shown positive impacts on generalized anxiety, social anxiety, OCD, and PTSD.	3

Arthritis	CBD can help reduce inflammatory pain associated with arthritis.	2.5
Asthma	CBD may help combat airway hyperactivity and asthma.	2.5
Autism	In addition to combating seizures, CBD may help with aggressive behavior, repetitive behaviors, and hyperactivity and social issues.	2.5
Autoimmune Disorders	CBD may reduce pain associated with inflammation, but can also contribute to balance in the immune system.	4
Cancer	CBD can help manage symptoms associated with chemotherapy, but is also showing promise in inhibiting tumor growth and metastases.	1-4
Concussions, Head Trauma	CBD has neuroprotective properties and may help healing after brain trauma.	2.5
Depression, Mood Disorders	CBD may increase the body's access to serotonin and dopamine, helping combat feelings of sadness. Research has also shown a link between brain inflammation and mood disorders.	2.5
Diabetes	Cannabis has shown promise in regulating weight, preventing obesity, and stabilizing blood sugars. CBD may also help with pain or improve circulation to off-set symptoms associated with	3.5

	diabetes.	
Eating Disorders	Research supports a profound connection between the endocannabinoid system, the brain, and eating disorders. CBD may help prevent obesity or encourage weight gain in cases of anorexia.	2.5-3
Inflammatory Bowel Syndrome (IBS)	Anti-oxidants help gut inflammation. Also a healthy endocannabinoid system can help regulate inflammatory responses in the body. This points to CBD as a promising treatment for IBS.	3.5
Migraines	Some research has connected migraines with endocannabinoid deficiencies and abnormal inflammatory responses, both of which CBD may treat.	3.5
Multiple Sclerosis	Sativex has shown promise in treating symptoms associated with Multiple Sclerosis.	3
Nausea, Vomiting	Cannabinoids are anti-emetic.	3
Neurodegenerative Diseases, Huntington's, Parkinson's	With neuroprotective properties, CBD may help prevent or delay the on-set of some neurodegenerative diseases.	2-3

Pain	Cannabis, in all its forms, has been used to treat pain for centuries. Evidence supports cannabinoids as an analgesic.	3
Post-traumatic Stress Disorder (PTSD)	Cannabis may help the mind eliminate traumatic memories, or help a person cope with those memories. CBD shows promise as it does not encourage dependency or abuse, as marijuana can.	3
Schizophrenia	CBD can help reduce stress and may have antipsychotic potential.	2.5
Seizure Disorders	CBD may reduce the frequency, intensity, and duration of seizures.	3
Skin Conditions, Acne, Psoriasis	CBD may help balance the immune system, control inflammation, and potentially prevent outbreaks.	3.5
Sleep Disorders	CBD may help treat insomnia, though for some CBD can contribute to alertness.	3.5

# Preventative Benefits

In addition to treating certain conditions, CBD may have preventative health benefits. This chart is a round-up of those potential benefits with links to relevant medical studies on each area of the body or condition.

Area of Body/Condition	Benefit
Bone	CBD led to <a href="#">improvement of fracture healing</a> in lab rats and may influence bone mass, helping prevent age-related bone diseases
Cancer	CBD <a href="#">lowered the risk of colon cancer</a> in lab rats CBD topicals may help <a href="#">prevent or treat skin cancer</a>
Diabetes	CBD shown to <a href="#">lower the risk of diabetes</a> in lab rats Studies are underway to see if CBD can <a href="#">treat or cure diabetes</a>
Heart	CBD may <a href="#">prevent atherosclerosis</a> CBD may <a href="#">prevent vascular damage</a>
Inflammation	Cannabinoids have <a href="#">anti-inflammatory properties</a> , which could guard against conditions such as Huntington's disease, Alzheimer's, depression, and anxiety
Mind	CBD has <a href="#">neuroprotective effects</a> and may be a promising <a href="#">treatment for disorders like Alzheimer's</a> CBD is also a <a href="#">powerful anti-oxidant</a>
Weight	Cannabis users had lower <a href="#">obesity rates</a> Cannabis users also had <a href="#">slimmer waistlines</a>